



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

LETTERS TO THE EDITOR.

** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

The editor will be glad to publish any queries consonant with the character of the journal.

The Color Question.

A FEW weeks ago (*Science*, March 25) Mr. Milton Bradley wrote to you on this subject, which unfortunately is still in an unsatisfactory state, notwithstanding the researches of Helmholtz and Maxwell. Mr. Bradley is, do doubt, quite right in treating, for the purposes of his system, all the colors of the spectrum as of equal value, but it is by no means as clear as he supposes that the three colors, red, green, and violet, are entitled to be considered primaries in preference to red, yellow, and blue, if any colors are to be thus treated. The fact that Maxwell found the cross-section of a cone of color to be approximately triangular with red, green, and violet at the three corners, proves little as to the real relation between the various colors. It is very easy by means of a prism so to condense a spectrum as that only red, green, and violet shall be visible, and my impression is that some such explanation will be found of Maxwell's supposed elementary green at least. I read with suspicion such statements as that most natural yellows and blues when analyzed by a prism show a large quantity of green

in their composition, and that yellow can be produced by mingling green and violet. In the former case the green is due probably to an overlapping of the yellow and the blue, notwithstanding the belief, which is erroneous, that the yellow and blue of the prism will not produce green. Anyone on looking through a prism at different objects can easily devise a mode of causing two spectra to overlap, and thus convince himself that the blue and yellow do actually thereby give rise to green. He can, moreover, make the red and violet rays overlap, and thus form shades of purple. Such being the case, green, although sometimes in overlapping spectra observed by looking through the prism it appears to obliterate the blue, is no more entitled to be called a primary color than purple itself. For all practical purposes all the colors should be regarded as primary, the question of their actual relation being left to be settled by further investigation.

C. STANILAND WAKE.

349 North Clark Street, Chicago, Ill.

Family Types.

CAN I ask one or two questions about Mr. Williams's note in the issue of April 15? Does the mother in placental mammals tend to assimilate in respect to blood to the father? Does the result of a study for twenty-five years of one family offer more than the slightest evidence on the point in question? Does the mother frequently acquire diseases belonging to the father indirectly through the child she is carrying? Does each child in a family

CALENDAR OF SOCIETIES.!

Women's Anthropological Society of America, Washington.

April 30.—Miss Annie T. Smith, Report of the Committee on the Investigation of Directive Forces in Society; Mrs. York, Medical Inspection of Schools; Miss Sickles, The Ghost Dance.

Biological Society, Washington.

April 30.—The principal paper of the evening was: The Distribution of Land, Water, and Ice on this Continent in Later Geological Periods, by Professor W. J. McGee; Communications: Erwin F. Smith, The Relation of Plants to the Soil; Charles Hallock, Where Salt-Water Fishes Hide: Results of Deep-Water Seining.

Society of Natural History, Boston.

May 4.—J. S. Kingsley, Notes on the Anatomy of *Amphiuma*.

Publications Received at Editor's Office.

BAUSCH, EDWARD. Manipulation of the Microscope. Rochester, Bausch and Lomb Optical Co. 16°. 128 p. Ill.

CATHCART, GEORGE R. Literary Reader; A Manual of English Literature. New York, American Book Co. 12°. 560 p. \$1.15.

CHAPMAN, C. H. An Elementary Course in Theory of Equations. New York, John Wiley & Sons. 12°. 98 p. \$1.50.

CHURCH, IRVING P. Notes and Examples in Mechanics. New York, John Wiley & Sons. 8°. 144 p. plates. \$2.

GORMAN, S. The Discoboli. Cambridge, Museum Comp. Zool. 4°, paper. 96 p. plates.

GREELY, A. W. Irrigation and Water Storage in the Arid Regions. Report to the Sec. of War. Washington, Government. 4°, paper. 356 p. Maps.

HURST, G. H. Silk Dyeing, Printing and Finishing. With numerous colored patterns. New York, Macmillan & Co. 16°. 184 p. \$2.

LANDAUER, J. Blowpipe Analysis. Trans. by James Taylor. 2d ed. New York, Macmillan & Co. 16°. 190 p. \$1.10.

MORRIS, R. ANNA. Physical Education in the Public Schools. New York, American Book Co. 8°. 192 p. \$1.

Business Department.

The Providence and Stonington Steamship Company's new steel steamer *New Hampshire* made a record for phenomenal speed on her trial trip at Wilmington, Del., on April 21, 1892. Loaded with 600 tons dead weight, she made time over the measured mile, two minutes fifty-nine seconds, an average of over twenty miles per hour. The *New Hampshire* is a sister ship to the *Maine*, recently built at Wilmington, for the Providence and Stonington Steamship Company, which has also proven a great success, both as a fast sailer and a most comfortable and luxurious boat for passengers.

Exchanges.

[Free of charge to all, if of satisfactory character. Address N. D. C. Hodges, 874 Broadway, New York.]

For sale or exchange, *Das Ausland*, 10 vols., 1882 to 1891, including 6 vols. bound, 4 in numbers. Wheeler Survey, vol. 1, Geog. Report; also vol. 6, Botany; Production of gold and silver in the United States, 1880, '1, '2, '3, '5; Selfridge Isthmus of Darien. Will sell at very low prices. J. F. James, 1443 Corcoran St., Washington, D. C.

For exchange.—A fine thirteen-keyed flute in leather covered case, for a photograph camera suitable for making lantern slides. Flute cost \$27, and is nearly new. U. O. COX, Mankato, Minn.

To exchange; Experiment Station bulletins and reports for bulletins and reports not in my file. I will send list of what I have for exchange. P. H. ROLFS, Lake City, Florida.

Finished specimens of all colors of Vermont marble for fine *mosaics* or *mosaics*. Will be given only for valuable specimens because of the cost of polishing. GEO. W. PERRY, State Geologist, Rutland, Vt.

For exchange.—Three copies of "American State Papers Bearing on Sunday Legislation," 1891, \$2.50, new and unused, for "The Sabbath," by Harmon Kingsbury, 1840; "The Sabbath," by A. A. Phelps, 1842; "History of the Institution of the Sabbath Day, Its Uses and Abuses," by W. L. Fisher, 1859; "Humorous Phases of the Law," by Irving Browne; or other works amounting to value of books exchanged, on the question of governmental legislation in reference to religion, personal liberty, etc. If preferred, I will sell "American State Papers," and buy other books on the subject. WILLIAM ADISON BLAKELY, Chicago, Ill.

For Sale or Exchange for books a complete private chemical laboratory outfit. Includes large Becker balance (200g. to 1-1/2 kg.), platinum dishes and crucibles, agate mortars, glass-blowing apparatus, etc. For sale in part or whole. Also complete file of *Scientific American*, 1862-1885 (62-71 bound); Smithsonian Reports, 1854-1883; U. S. Coast Survey, 1854-1860. Full particulars to enquirers. F. GARDINER, JR., Pomfret, Conn.

Wants.

Any person seeking a position for which he is qualified by his scientific attainments, or any person seeking some one to fill a position of this character, be it that of a teacher of science, chemist, draughtsman, or what not, may have the 'Want' inserted under this head FREE OF COST, if he satisfies the publisher of the suitable character of his application. Any person seeking information on any scientific question, the address of any scientific man, or who can in any way use this column for a purpose consonant with the nature of the paper, is cordially invited to do so.

TRANSLATOR wanted to read German architectural works at sight (no writing). One familiar with technical terms desired. Address "A.," Box 149, New York Post Office.

WANTED.—A position in a manufacturing establishment by a manufacturing Chemist of inventive ability. Address M. W. B., care of *Science*, 874 Broadway, N. Y.

WANTED.—Books on Anatomy and Hypnotism. Will pay cash or give similar books in exchange. Also want medical battery and photo outfit. DR. ANDERSON, 182 State street, Chicago, Ill.

WANTED.—A college graduate with some normal training, to teach the sciences, at \$1,800 per year, in a Southern college. A Baptist or a Methodist preferred. Must also be a first-class Latin scholar. A. H. Beals, Box K, Milledgeville, Ga.

A PROFESSORSHIP in Chemistry is wanted by one who has had five years' experience in that capacity. Would prefer to give instruction by lectures and experiments rather than by text-book methods. Would like a position in a college or university where there is a good student's laboratory. Special points of strength: ability and thorough control of a class and good order during lectures and recitations. (2) Accuracy in experimenting with chemicals and skill in the manipulation of chemical apparatus. The permission of several distinguished educators has been given to refer to them if required. Would not care to accept a position paying less than \$1,500. Address B. E., care of *Science*, 874 Broadway, New York.

ADDRESS WANTED.—Will some one please send me the address of the Secretary of the American Philological Society. Also that of Herbert Spencer. "ADDISON," Room 84, 164 Madison St., Chicago, Ill.

ADDRESSES of Old Book Dealers wanted.—Wish to obtain a number of old books out of print. I very much desire the addresses or catalogues of rare second-hand book dealers. If there is a directory or list of such dealers I should like to obtain possession of one. W. A. BLAKELY, Chicago, Ill.

POPULAR MANUAL OF VISIBLE SPEECH AND VOCAL PHYSIOLOGY.

For use in Colleges and Normal Schools. Price 50 cents. Sent free by post by

N. D. C. HODGES, 874 Broadway, N. Y.

find the mother more impregnated with the blood of the paternal house? And if so, does this impregnation seriously tend to make the children favor the family that gives them the name? Is the fact of parental influences — the influences here alluded to being those suggested by Mr. Williams, sympathy or antipathy for people frequently seen — thoroughly established? In a love-match is the face of the father more commonly reproduced? If there are reversions to a primitive type, what is the type — one lying on the maternal or the paternal side?

Do family portraits show a uniformity? If they do, is not the question settled? How, then, can the fact that family portraits show a uniformity — that being the point in question — be cited to prove the point in question, that family portraits do, or do not, show a uniformity?

J. C. DANA.

Denver, Col., April 27.

Exhaustion

Horsford's Acid Phosphate.

A wonderful remedy, of the highest value in mental and nervous exhaustion.

Overworked men and women, the nervous, weak and debilitated, will find in the Acid Phosphate a most agreeable, grateful and harmless stimulant, giving renewed strength and vigor to the entire system.

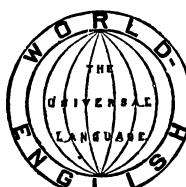
Dr. Edwin F. Vose, Portland, Me., says: "I have used it in my own case when suffering from nervous exhaustion, with gratifying results. I have prescribed it for many of the various forms of nervous debility, and it has never failed to do good."

Descriptive pamphlet free.

Rumford Chemical Works, Providence, R. I.

Beware of Substitutes and Imitations.

CAUTION.—Be sure the word "Horsford's" is on the label. All others are spurious. Never sold in bulk.



WORLD-ENGLISH. 25 Cents. HANDBOOK OF WORLD-ENGLISH. 25 Cents.

Ex-President Andrew D. White, of Cornell University, says: "I believe that the highest interests of Christian civilization and of humanity would be served by its adoption."

"So set down, our tongue is the best for the world to unite upon." — *Brooklyn Eagle*.

"The idea of Mr. Bell has much to recommend it, and the presentation is charmingly clear." — *American*, Phila.

"The result is a language which cannot fail to meet with acceptance." — *Boston Traveller*.

"World-English deserves the careful consideration of all serious scholars." — *Modern Language Notes*.

Sent, postpaid, on receipt of price.

N. D. C. HODGES, 874 Broadway, New York.

SCIENCE.

AMONG THE PUBLISHERS.

THOMAS WHITTAKER has just published "The Story of the Discovery of the New World," by Frederick Saunders of the Astor Library, illustrated by C. A. Bobbitt.

— A. C. McClurg & Co. announce a volume entitled "Direct Legislation by the People," by Nathan Cress. The author gives a brief review of direct government from the earliest times, and of the rise and development of popular representation. He then considers the advantages of combining direct popular legislation with representative institutions, in which direction, he believes, lies emancipation from political corruption. In this connection he examines two remarkable features of the Swiss Government, viz., the *Referendum* and the *Popular Initiative*. The author's stand-point is said to be conservative.

New Method of Protecting Property from Lightning. The Lightning Dispeller.

Price, \$20 to \$30.—According to size.

The Patent Lightning Dispeller is a conductor specially designed to dissipate the energy of a lightning discharge, — to prevent its doing harm, — placing something in its path upon which its capacity for causing damage may be expended.

No recorded case of lightning stroke has yet been cited against the principle of the Dispeller. So far as known, the dissipation of a conductor has invariably protected under the conditions employed.

Correspondence solicited.

AGENTS WANTED.

The American Lightning Protection Company

United Bank Building, Sioux City, Iowa.

ESTERBROOK'S STEEL PENS. OF SUPERIOR AND STANDARD QUALITY. Leading Nos.: 048, 14, 130, 135, 239, 333 For Sale by all Stationers. THE ESTERBROOK STEEL PEN CO., Works: Camden, N. J. 26 John St., New York.

THE LATEST IMPROVEMENT FOR STEREOPTICON. OUR PATENT. MULTI-FOCAL ATTACHMENT. PRODUCES PICTURES FROM 12 TO 20 FEET AT ANY DISTANCE WITHOUT CHANGING THE OBJECTIVE. SEND FOR DESCRIPTIVE CIRCULAR TO QUEEN & CO. PHILA.

THE CHEAPEST AND BEST! PHOTO ENGRAVING CO. 67 PARK PLACE, NEW YORK. ENGRAVING FOR ALL ILLUSTRATIVE AND ADVERTISING PURPOSES.

GEM OPALS.

Cut ready for setting. Having purity, we are offering them at about one-fifth jewelers' prices; 50c., \$1, \$1.50, \$2, \$3. This is a rare opportunity to secure a fine gem very cheap. 100 pp. Mineral Catalogue 15c. in cloth 25c., Supplement 2c. GEO. L. ENGLISH & CO., Mineralogists, 733 and 735 Broadway, New York City.

PATENTS

For INVENTORS. 40-page BOOK FREE. Address
W. T. Fitzgerald, Attorney at Law, Washington, D. C.

THE WEEKLY BULLETIN OF NEWSPAPER AND PERIODICAL LITERATURE.

Catalogues and Classifies Each Week
THE PRINCIPAL CONTENTS OF
THE PERIODICAL PRESS.

That huge mass of material heretofore inaccessible to the eager student is now rendered available. Special attention is invited to the Bulletin's

INDEX OF TECHNICAL LITERATURE

Send for a free sample copy and learn how

The Bulletin Supplies

The Articles Catalogued.

Address THE WEEKLY BULLETIN,
5 Somerset Street, - - Boston, Mass.

NEO-DARWINISM AND NEO-LAMARCKISM.

By LESTER F. WARD.

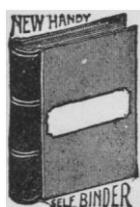
Annual address of the President of the Biological Society of Washington delivered Jan. 24, 1891. A historical and critical review of modern scientific thought relative to heredity, and especially to the problem of the transmission of acquired characters. The following are the several heads involved in the discussion: Status of the Problem, Lamarckism, Darwinism, Acquired Characters, Theories of Heredity, Views of Mr. Galton, Teachings of Professor Weismann, A Critique of Weismann, Neo-Darwinism, Neo-Lamarckism, the American "School," Application to the Human Race. In so far as views are expressed they are in the main in line with the general current of American thought, and opposed to the extreme doctrine of the non-transmissibility of acquired characters.

Price, postpaid, 25 cents.

N. D. C. HODGES, 874 Broadway, N. Y.

A TEMPORARY BINDER

for *Science* is now ready, and will be mailed postpaid on receipt of 75 cents.



This binder is strong, durable and elegant, has gilt side-title, and allows the opening of the pages perfectly flat. Any number can be taken out or replaced without disturbing the others, and the papers are not mutilated for subsequent permanent binding. Filed in this binder, *Science* is always convenient for reference.

N. D. C. HODGES, Publisher,
874 Broadway, New York.